

Waveguide Dual-Directional Coupler

WR-10/75-110GHz/10dB Coupling

Model: TDC-075110-10-10

TDC-075110-10-10 is a four-port waveguide dual-directional coupler that delivers a 10 dB nominal coupling level and 30 dB minimum directivity across the full waveguide band from 75 to 110 GHz. The interfaces of the dual-directional coupler configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Operating Frequency 75 to 110GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

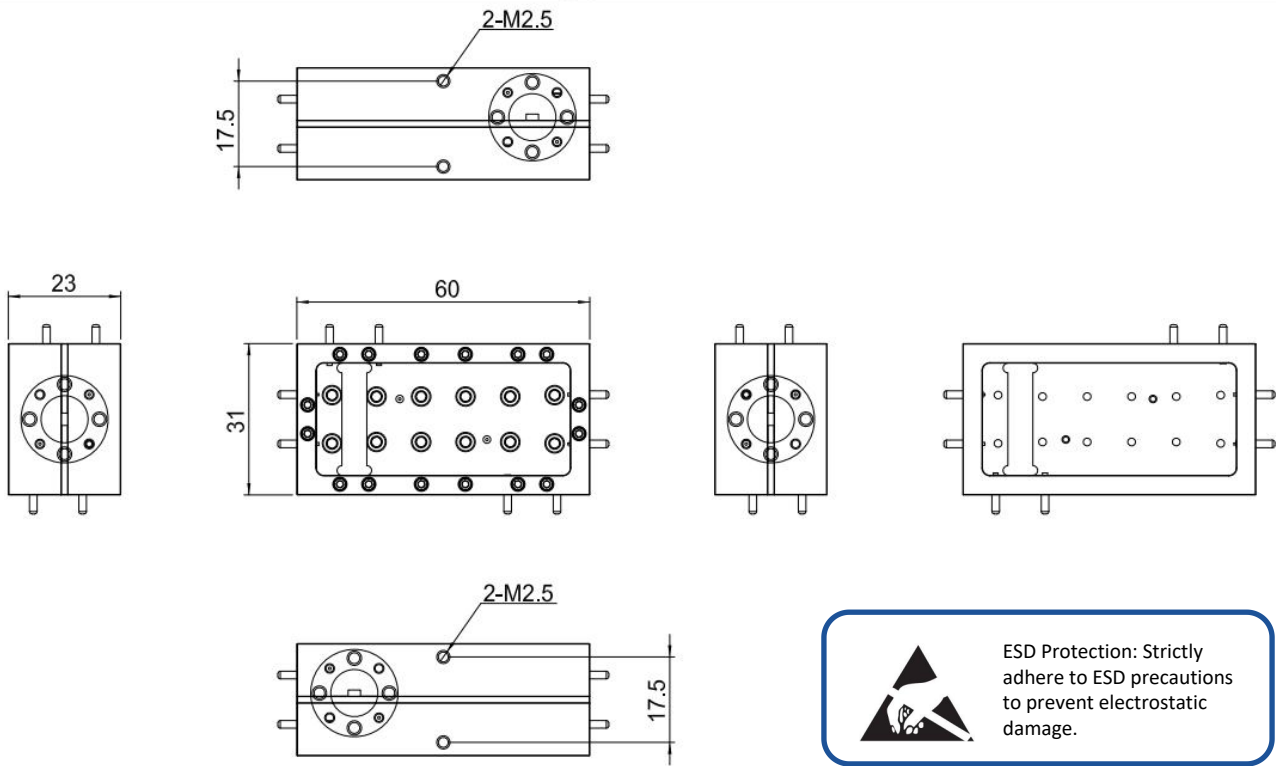
Parameter	Min	Typ	Max	Units
Frequency Range	75		110	GHz
Main Line VSWR		1.1		:1
Coupling Port VSWR		1.3		:1
Insertion Loss		2		dB
Coupling		10		dB
Directivity	30			dB

Envrionmental And Physical Characteristics:

Description	Parameter	Units
Material	Brass	
Finish	Gold plated	
Waveguide Connectors	WR-10/UG387/U	
Coupled Port	WR-10/UG387/U	
Size	60*31*23	mm

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



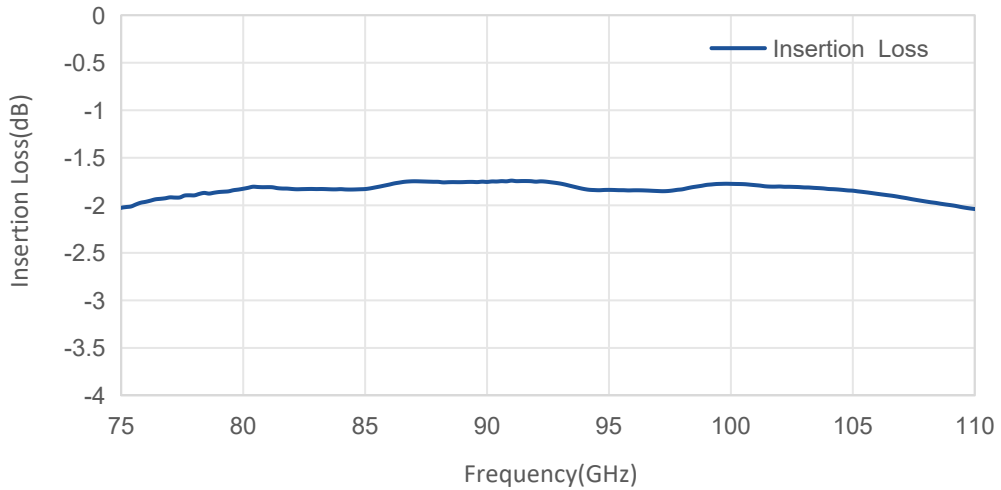
 ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Ordering Information:

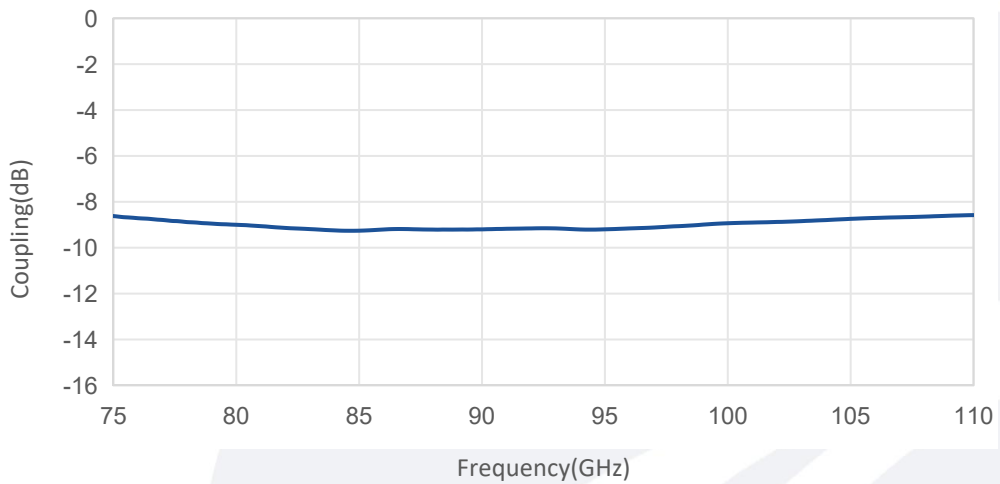
Base Number	Description	Revision
TDC-075110-10-10	Waveguide Dual-Directional Coupler, 75-110GHz, Insertion Loss: 2dB Typ, Coupling: 10dB Typ,WR-10	Rev.1.0

Typical Performance Data:

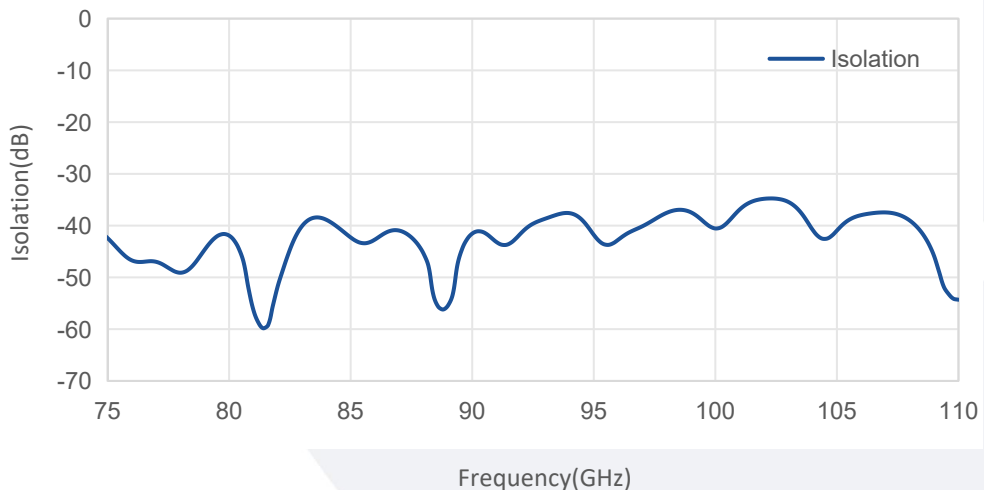
Insertion Loss vs Frequency



Coupling vs Frequency



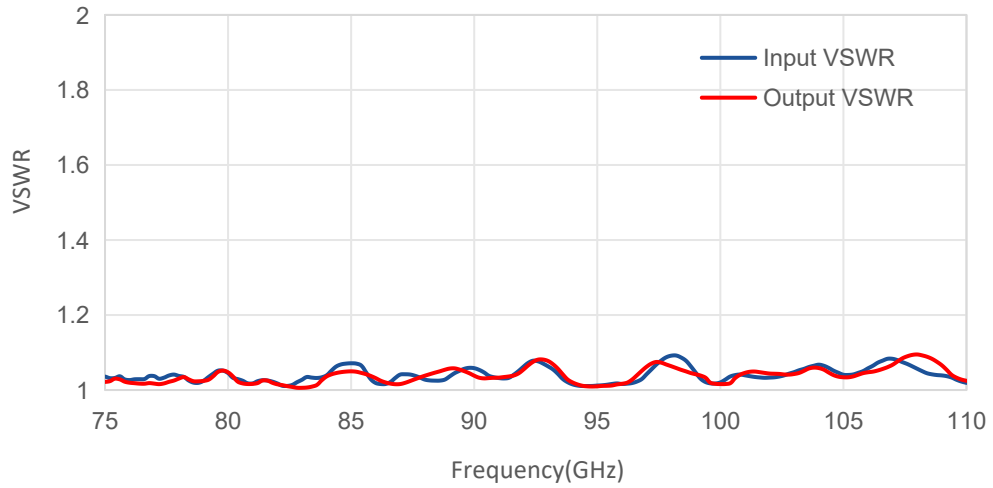
Isolation vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

VSWR vs Frequency



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